

## CLAIMS

I claim:

1. Data entry device comprising:  
a keyboard having a plurality of multifunction key positions;  
5 a plurality of keys each key containing an inscription on the keycap thereof representing a character or function and containing a multibit binary code therein identifying the character or function, said keys being capable of being positioned in any one of the key positions in the keyboard, said keys being responsive to user contact to the keycaps thereof;  
a circuit matrix disposed below said keyboard said circuit board being capable of detecting  
10 the binary code when one of the keys is contacted to produce an electrical signal representative of the binary code associated with the contacted key;  
a standard interface connector to connect the keyboard to a computer; and  
a controller for converting the output of the circuit matrix for the contacted key to one which is recognizable by the computer so that the output of the keyboard provides to the standard  
15 interface connector correctly, identifies the contacted keys character or function to the computer irrespective of the position of the key on the keyboard.

2. The data entry device of Claim 1, wherein the controller includes a look-up table responsive to the multi-bit output of the circuit matrix to provide a standard scan code recognizable by a computer to the interface connector.

20 3. The data entry device of Claim 1 wherein the keys have in the base of the key a plurality of locations each representing one digit in the multi-bit binary code and one or more pins each positioned one of the locations so that the keys all contain a different combination of locations with posts and without posts to identify them in accordance with the multi-bit binary code.

4. The data entry device of Claim 1 wherein the keys each have a circuit embedded therein  
25 storing the multi-bit binary code identifying the key and have electrical contacts providing

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excitation to the circuit and connecting it to the matrix to provide a multi-bit code signal to the controller to identify the key.

5. The data entry device of Claim 3 wherein the circuit matrix provides the bits of the multi-bit binary code to the controller in parallel.

*Claim 6*

5 6. The data entry device of Claim 4 wherein the circuit matrix provides the bits of the multi-bit binary code to the controller serially.

*Claim 7*

7. The data entry device of Claim 2 wherein the controller contains a lookup table which provides a standard key scan code signal recognizable by a computer to the interface connector in response to a multi-bit output of the circuit matrix identifying one of the keyboard keys.

10 8. The data entry device of Claim 7 wherein the circuit matrix contains a plurality of capacitive switches each switch responsive to one of the pins to generate a key make signal.

*ADD AD add C1*